



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11)

EP 1 536 074 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
20.09.2006 Bulletin 2006/38

(51) Int Cl.:
E03D 9/03 (2006.01)

(43) Date of publication A2:
01.06.2005 Bulletin 2005/22

(21) Application number: **04460052.6**

(22) Date of filing: **26.11.2004**

(84) Designated Contracting States:
**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
HU IE IS IT LI LU MC NL PL PT RO SE SI SK TR**
Designated Extension States:
AL HR LT LV MK YU

- **Piekos, Henryk**
05-270 Marki (PL)
- **Nachyla, Roman**
09-110 Sochocin (PL)
- **Ozimkowski, Marek**
31-279 Krakow (PL)

(71) Applicant: **Przedsiębiorstwo Wielobranzowe
Produkcyjno-Usługowe, "Inter-Sano" Sp. z O.O.**
05-300 Minsk Mazowiecki (PL)

(74) Representative: **Skarbek, Leonard**
ul. Pustuleczki 30A-1
02-811 Warszawa (PL)

(72) Inventors:
• **Matwiejczuk, Jadwiga**
31-243 Krakow (PL)

(54) Washing fluid dispensing device

(57) A washing fluid dosing device for toilet bowls to be placed inside toilet cisterns has a special mixing chamber (5) supplied by gravity with washing fluid from a fluid container (1) through a washing fluid metering nozzle located higher than the mixing chamber (5) and a valve controlling opening and closing said metering nozzle, said valve being provided with a vertical needle (3) the position of which is determined by a float (7) placed in the toilet cistern.

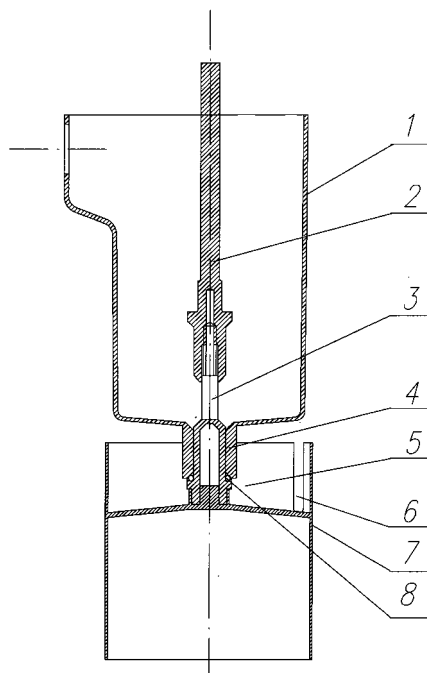


Fig. 1

EP 1 536 074 A3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 04 46 0052

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 6 496 987 B1 (CHOU MING-HSIUNG) 24 December 2002 (2002-12-24) * figures 4-6 * -----	1,2	INV. E03D9/03
			TECHNICAL FIELDS SEARCHED (IPC)
			E03D
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 16 November 2005	Examiner Geisenhofer, M
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

2
EPO FORM 1503 03.82 (P04C01)

**CLAIMS INCURRING FEES**

The present European patent application comprised at the time of filing more than ten claims.

- ☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- ☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- ☒ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

1, 2



The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1,2

Details of the float (situated coaxially with the valve needle, lower than the mixing chamber)

2. claims: 1,3

Cross-section of the metering nozzle

3. claims: 1,4

Details of the metering nozzle (dimensions, ring seal, threaded mandrel at the upper tip)

4. claims: 1,5

Details of the mixing chamber (connection to needle, conical geometry, drainage openings)

5. claims: 1,6

Details of the float (open-bottom cylinder, dimensions compared to the mixing chamber)

6. claims: 1,7

Details of the washing fluid container (inverted conical geometry)

7. claims: 1,8

Details of the metering nozzle (upper flange, further dimensions, connection between needle and upper mandrel)

8. claims: 1,9

Details of the metering nozzle (cone-shaped, seat in the face of its lower part)

9. claims: 1,10

Details of the float (torus shaped)



The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

10. claims: 1,11

Details of the float (material, location relative to the
mixing chamber)

11. claims: 1,12

Details of the valve needle (mandrel, length relative to the
wash fluid container)

12. claims: 1,13

Details of the valve needle (threaded middle part)

16-11-2005

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6496987	B1	24-12-2002	NONE

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82